VECTOR
The Freedom of POWER

VEC117

VectorLite
ONE MILLION CANDLEPOWER

CORDLESS, RECHARGEABLE SPOTLIGHT WITH BUILT-IN CCFL AREA UTILITY LIGHT

OWNER'S MANUAL & WARRANTY INFORMATION

THIS MANUAL CONTAINS IMPORTANT INFORMATION REGARDING SAFETY, OPERATION, MAINTENANCE AND STORAGE OF THIS PRODUCT. BEFORE USING, READ AND UNDERSTAND ALL CAUTIONS, WARNINGS, INSTRUCTIONS AND PRODUCT LABELS, PLUS YOUR VEHICLE'S BATTERY MANUFACTURER GUIDELINES. FAILURE TO DO SO COULD RESULT IN INJURY AND/OR PROPERTY DAMAGE.

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IMPORTANT SAFETY INSTRUCTIONS

WARNINGS:

Contains non-spillable sealed lead acid battery. Must be recycled or disposed of properly.

DO NOT dispose of batteries in fire, as this may result in an explosion.

DO NOT open battery or short circuit, as this may cause the battery to leak or get hot causing personal injury. Any disposal questions call toll-free (887) 288-7722.

Please read Instruction Manual completely for all safety and warning instructions.

CAUTIONS:

USE ONLY WITH AC AND DC CHARGING ADAPTERS THAT ARE PROVIDED WITH UNIT.

DO NOT OVERCHARGE: CHARGE UNTIL GREEN BATTERY STATUS LED LIGHTS. DO NOT CHARGE FOR MORE THAN 24 HOURS.

a) First use - average charge time is 8-10 hours.

b) Charge after first use - average charge time is 10-12 hours.

c) If unit is not used for two months, average charge time is 4 hours. After recharge, disconnect charging adapter and wait 5 minutes before use.

1. Do not substitute power cords or charging adapters. Only charge with supplied AC and DC charging adapters. Charging Adapters for this unit supply 12 volts DC.
2. Do not submerge in water. This unit is not waterproof - it is water resistant.
3. Keep children away from spotlight. This is not a toy!
4. Lens gets very hot when spotlight is operating. Do not touch lens while operating. Keep combustibles away from spotlight lens - extreme heat can cause fires.
6. Keep sharp objects away from lens - it is glass and it can break.
7. Do not drop or throw spotlight, it contains glass and a sealed lead acid battery.
8. Dispose of unusable batteries in a responsible manner (See battery disposal section).
9. Do not crush, cut, pull or expose charging adapter cords to extreme heat.
10. Keep charging adapter cords away from sharp edges.
11. Position charge adapter cords so that they do not become entangled or become a safety hazard.
12. Do not shine spotlight in eyes.
13. Do not operate while recharging.

1. INTRODUCTION

Congratulations on purchasing the VectorLite™ Model VEC117, an advanced design combination variable brightness spotlight and long lasting, soft CCFL area light. It uses a powerful proven-technology rechargeable, non-spillable sealed lead acid battery that allows for years of dependable use, recharge after recharge. It was designed from the ground up to be the most versatile and practical light for householdd, roadside, travel, camping, tailgate parties and boating. The spotlight gives you the kind of light you need, when and where you need it.

Extremely rugged construction protects the unit from most damage and from most vibration and shock. It is water resistant, not waterproof.

Two recharge adapters are supplied with the spotlight. It can be recharged from any 110/120 volt 60 Hz AC receptacle. It can also be recharged from a 12 volt DC accessory socket. This permits recharge flexibility for use around home, business or in the field. 12 volt DC power is available from most vehicles, boats, jump starters and portable battery packs. Vector has a variety of portable power products that would make ideal companions.

2. ADDITIONAL FEATURES

- Powerful, prefocused, replaceable quartz halogen bulb in spotlight
- Cold Cathode Fluorescent Lamp (CCFL) Area Light provides up to 8 hours of continuous operation
- Trigger Switch sets brightness of spotlight to one of three levels
- Trigger Switch Lock maintains spotlight operation without depressing trigger
- Trigger Switch Lock locks Trigger Switch to OFF position or ON position
- Rubber safety guard (bezel) around lens protects spotlight
- Rubber safety cap protects battery compartment
- Separate Power Switch for CCFL Area light
- Comfortable pistol grip and lanyard
- Battery Status LED Panel displays battery level while charging or whenever area light is turned on

NOTE: This unit is shipped in a partially charged state. Initially charge unit using the AC charger for 10 hours or until green Battery Status LED lights. Charge after each use until green LED lights.

3. OPERATION

The Spotlight has a unique SmartLight™ digital control dimmer with three levels of brightness. Depressing the trigger switch advances the brightness of the spotlight too dim, brighter, brightest, and so on. This allows the user to set the desired brightness of the light. Depressing trigger at one second intervals to allow the internal circuits to set to the next level. Lower brightness operation extends the run time. The Trigger Switch may be locked in the ON position to provide continuous light at any level without continuously depressing the Trigger Switch. The spotlight's circuitry will automatically dim the light when the battery is power is reducing. This preserves the run time of the spotlight. The circuit also prevents deep discharge of the battery even if the light turns off from battery discharge. Recharge as soon as possible, as allowing a discharged battery to remain so will reduce the battery life.

ON/OFF operation of the CCFL Area Light is controlled by the Area Light Push Button. This long lasting light can continuously operate up to eight hours on a full battery charge. This push button also turns on the Battery Status Display, a series of three LEDs. The red LED indicates a discharged battery, and green LED indicates a fully charged battery. The amber LED indicates a partially discharged battery.

Figure 1

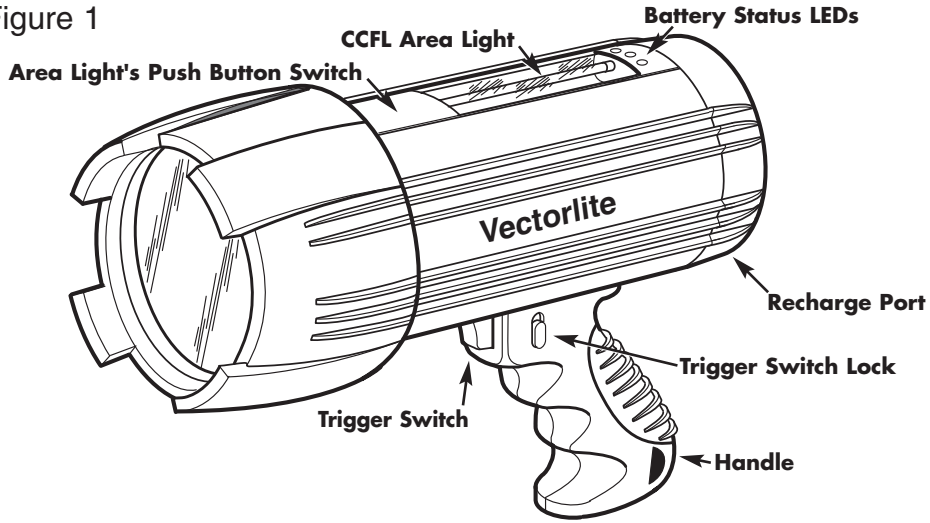


Figure 1 shows locations of the Trigger Switch, Trigger Switch Lock, Battery Status LEDs, CCFL Area Light and the Area Light's Push Button Switch. Recharge Port and Handle.

CHARGING THE VECTORLITE DURING EITHER AC RECHARGE/OR DC RECHARGE:

1. Connect the charger to an appropriate power source (see below DC or AC Source).
2. Plug the charger's barrel connecter into the Recharge Port (see Figure 1).
3. Recharge for 10 hours maximum or until the green LED is lit.
4. After recharge, disconnect the barrel connector from the Recharge Port and store the adapter.
5. Disconnect charger and wait 5 minutes before use.

Charging from a DC Source

Plug the DC fused Recharge/Power Adapter (included) into the Recharge Port on the back of the spotlight body, and then insert the power plug into the accessory socket of your vehicle or other 12 VDC power source. Make sure the spotlight is OFF and the Trigger Switch is in the OFF position. Allow approximately 10-12 hours charging time. Recharge until the green Battery Status LED is lit. Make sure the DC source (jump starter, battery pack, vehicle accessory socket, etc.) is 12 Volt DC. The DC source should be able to supply at least one half amp at 12 VDC for 10 hours. This means a battery pack should be charged with at least 5 Amp Hours Capacity (See figure 2).

Charging from an AC Source

Recharging from an AC outlet requires the use of the AC/DC Recharge Adapter (See Figure 3). Make sure the AC outlet provides 110 to 120 VAC at 60 Hz.

Figures 2

Figures 3

Caution: Use the supplied AC Recharge adapter only; do not substitute with any other.
AC Recharge requires the use of the supplied AC Recharge Adapter that supplies 12 volts DC. Charge for 10-12 hours or until the green Battery Status LED is lit.

5. PERIODIC MAINTENANCE

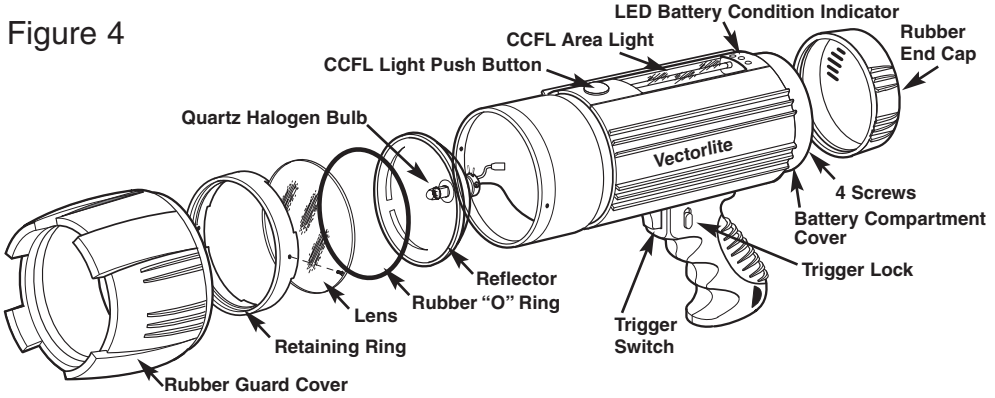
All batteries lose charge over time, especially when they are warm. AC recharge is recommended every two months, when not in frequent use. Use the AC recharger and charge for the recommended time. If the unit has dirt on it, gently clean the outer surfaces of the spotlight unit with a soft cloth moistened with a mild solution of water and detergent. Periodically inspect the condition of recharge adapters, connectors, and wires. Replace any components that may have become worn or broken.

6. PARTS REPLACEMENT

Three parts are replaceable by users. The quartz halogen bulb and sealed lead acid battery are proprietary and are available through Vector Manufacturing. A substitute 6 volt H3 55 watt bulb may be used instead of a Vector bulb. These can also be purchased from popular automotive parts suppliers nationwide. The DC charging adapter fuse is also replaceable. Contact Vector Manufacturing's Technical Support Department for replacement parts and any additional information that you may need. They may be reached at (954) 584-4446 or toll free at (866) 584-5504.

Figure 4 shows how the VectorLite is assembled. Use this illustration for bulb replacement and battery replacement.

Figure 4

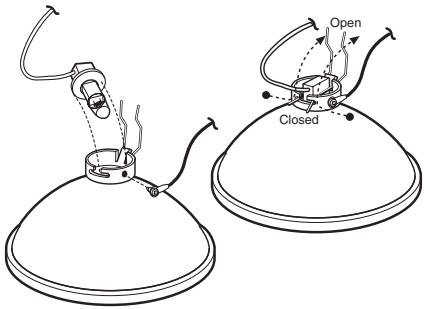


Spotlight Bulb Replacement

To replace the H3 type 6 volt bulb you will need a small Phillips type screwdriver and a replacement bulb (Vector Part VEC193). Bulb life may be shortened by installing a bulb with dirt or fingerprints on it. The bulb can be wiped clean with a cloth moistened with alcohol. During bulb installation, avoid touching the glass part of the bulb (See Figures 5a and 5b for details).

1. Disconnect the unit from any charging adapters.
2. Push forward the rubber bezel towards the front of the spotlight to reveal two small Phillips screws in the Retaining Ring.
3. Using the screwdriver, remove (counter-clockwise) the two screws and set them aside.
4. Lift off the Retaining Ring, glass lens and rubber O ring and set them aside.
5. Carefully remove the reflector and bulb assembly (See figures 5a and 5b).
6. Disconnect the bulb wire from the red power wire.
7. Unsnap the hairpin retaining wires from the reflector's flange.
8. Using the screwdriver, loosen the retaining screw to remove the bulb from the reflector (no need to completely remove this screw).
9. Lift out the bulb and the attached wire.
10. Insert the replacement bulb into the reflector's flange.
11. Put back and secure the hairpin retaining wires.
12. Connect the bulb power wire to the red power wire.
13. Tighten the retaining screw on the flange.
14. Place the reflector in position in the body of the spotlight.
15. Replace the rubber O ring in the groove around the perimeter of the reflector.
16. Replace glass and retaining ring so that the screw holes are aligned.
17. Secure retaining ring with two screws.
18. Replace rubber bezel.
19. Operate switch to ensure proper operation of spotlight.

Figure 5a & 5b



Replacing the Battery Pack

The Sealed Lead Acid Battery has a life of several years, if recharged promptly after each use. When a fully charged battery only provides about five minutes or less of spotlight operation, it should be replaced with a new one. To replace the battery, you will need a narrow shaft Phillips type screwdriver and a replacement battery (Vector Part VEC191). The battery pack can be replaced by doing the following:

1. Remove the rubber end cap from the body, noting the location of the Recharge Port.
2. Remove the four Phillips screws (clockwise) that fasten the inner hard plastic end cap (See Figure 4 for locations).
3. Separate the hard plastic cap from the body.
4. Note the battery can slide out of the body so keep the body level.
5. Slowly lift the lens end of the light so the battery slides out of the body.
6. The battery terminals are attached to two wires. These wires must be disconnected from the terminals of the battery.

WARNING: DO NOT ALLOW BARE WIRES OR CONNECTORS TO CONTACT EACH OTHER DANGEROUS SPARKING CAN OCCUR. NOTE WHICH WIRES ARE ON THE BATTERY TERMINALS

7. Note polarity of battery. Note which color wire is on which terminal.
8. Disconnect the wires from the battery and set the battery aside.
9. Connect the replacement battery, making sure the correct color wires are on the new battery terminals. Make sure POS (+) is red and NEG (-) is black.

   CAUTION: Incorrectly connected wires will not allow the spotlight to operate. Incorrect battery polarity will damage the circuits inside the spotlight. Double check battery polarity before reassembly!
10. Replace hard plastic battery compartment cover. Make sure wires are not crushed.
11. Replace four Phillips screws in battery compartment cover; do not over tighten.
12. Replace Rubber End Cap so the Recharge Port is accessible. Charge the recommended time for a new battery. This is typically 8-10 hours or until the green Battery Status LED is lit.

DC Plug Fuse Replacement

The fuse in the DC plug protects the charging circuit of the DC Recharge Adapter. If the AC recharger operates but the DC charging adapter does not, then the fuse may be opened.

To replace the fuse:

1. Unscrew the end cap of the DC Plug (counterclockwise).
2. Remove spring center contact and fuse.
3. Check fuse with a continuity checker.
4. If blown, locate replacement fuse with same type and rating.
5. Replace the fuse, spring, contact and end cap.
6. Screw end cap clockwise until it is finger tight-DO NOT OVER-TIGHTEN
7. Check for proper operation of DC Charger Adapter.

SAFE BATTERY DISPOSAL

Contains a maintenance-free, sealed, non-spillable, lead acid battery, which must be disposed of properly. Recycling is required, contact your local authority for information. Failure to comply with local, state and federal regulations can result in fines, or imprisonment.

Battery Disposal Warnings:

- Do not dispose of the battery in fire as this may result in an Explosion.
- Before disposing of the battery, protect exposed terminals with heavy-duty electrical tape to prevent shorting (shorting can result in injury or fire).
- Do not expose battery to fire or intense heat as it may explode.
- For more information on recycling this battery, call toll-free 877-288-7722.

7. SPECIFICATIONS

Spotlight Bulb	6 Volt, H3 series VEC193
Battery	Maintenance free, sealed lead acid, 6 Volt, 3 Amp Hour VEC191
AC Charger	UL Listed Class 2, 12V DC (300 mA)
DC Plug Fuse	5G2A/250 V
Weight	3 lbs 2 oz (1.5 kg)
Length	8.5 inches
Width	4.5 inches
Height	7.75 inches

TWO YEAR LIMITED WARRANTY PROGRAM

This limited warranty program is the only one that applies to this product, and it sets forth all the responsibilities of Vector Manufacturing, Ltd., regarding this product. There is no other warranty, other than those described herein.This Vector Manufacturing, Ltd. product is warranted, to the original purchaser only, to be free of defects in materials and workmanship for two years from the date of purchase without additional charge. The warranty does not extend to subsequent purchasers or users. Vector Manufacturing, Ltd. will not be responsible for any amount of damage in excess of the retail purchase price of the product under any circumstances. Incidental and consequential damages are specifically excluded from coverage under this warranty. This product is not intended for commercial use. This warranty does not apply to accessories or damage to units from misuse or incorrect installation. Misuse includes wiring or connecting to improper polarity power sources.

RETURN/REPAIR POLICY: Defective products, other than accessories, may be returned postage prepaid to Vector Manufacturing. Any defective product, other than accessories, that is returned to Vector Manufacturing within 30 days of the date of purchase will be replaced free of charge. If such a product is returned more than 30 days but less than two years from the purchase date, Vector Manufacturing will repair the unit or, at its option, replace it free of charge.

If the unit is repaired, new or reconditioned replacement parts may be used, at Vector Manufacturing's option. A unit may be replaced with a new or reconditioned unit of the same or comparable design. The repaired or replaced unit will then be warranted under the terms of the remainder of the warranty period. The customer is responsible for the shipping charges on all returned items. During the warranty period, Vector Manufacturing, Ltd. will be responsible for the return shipping charges.

LIMITATIONS: This warranty does not cover accessories, bulbs, fuses and batteries, defects resulting from normal wear and tear (including chips, scratches, abrasions, discoloration or fading due to usage or exposure to sunlight), accidents, damage during shipping to our service facility, alterations, unauthorized use or repair, neglect, misuse, abuse, failure to follow instructions for care and maintenance, fire, flood, and Acts of God.

If your problem is not covered by this warranty, call our Technical Support Department at (954) 584-4446 or toll free at (866) 584-5504 for general repair information and charges, if applicable. You may also contact us through our website at www.vectormfg.com.

STATE LAW RIGHTS: This warranty gives you specific legal rights. Some states do not allow limitations on how long an implied warranty lasts or the exclusion or limitation of incidental or consequential damages, so the exclusions or limitations stated herein may not apply. This warranty gives the purchaser specific legal rights; other rights, which vary from state to state, may apply.

TO REQUEST WARRANTY SERVICE FOR THIS PRODUCT: Contact Vector Manufacturing Technical Support by telephone, fax or mail. We suggest that you keep the original packaging in case you need to ship the unit. When returning a product, include your name, address, phone number, dated sales receipt (or copy), and a description of the reason for return and product serial number. After repairing or replacing the unit, we will return it to you within four weeks.

WARRANTY ACTIVATION: Please complete Warranty Activation Card and mail to: Vector Manufacturing. Enter VEC117 as Model and Spotlight 1,000,000 CP as Product Type. All Vector Manufacturing, Ltd. products must be registered within 10 days of purchase to activate this warranty. Mail the completed registration form, along with a copy of the original sales receipt to:

ATTN.: CUSTOMER SERVICE • VECTOR MANUFACTURING, Ltd.
4140 SW 28th Way, Ft. Lauderdale, FL 33312
PH: 954-584-4446 • TOLL FREE: 866-584-5504 • Fax: 954-584-5556.
You may also contact us at our web site www.vectormfg.com.

WARRANTY MUST BE ACTIVATED WITHIN 10 DAYS OF PRODUCT PURCHASE DATE.
WARRANTY IS NON-TRANSFERABLE AND NON-REFUNDABLE.
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